

## Environment and Natural Resources Trust Fund (ENRTF) 2010 Work Program

**Date of Report:** November 23, 2009  
**Date of Next Progress Report:** January 2011  
**Date of Work Program Approval:**  
**Project Completion Date:** June 30, 2012

### **I. PROJECT TITLE: Expanding Outdoor Classrooms at Minnesota Schools**

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**Web Site Address:** www.mndnr.gov/schoolforest

**Location:** Statewide. A map of the current School Forest locations is attached. New School Forests will be added throughout the state as a result of this project.

<b>Total ENRTF Project Budget:</b>	<b>ENRTF Appropriation</b>	<b>\$ 300,000</b>
	<b>Minus Amount Spent:</b>	<b>\$ 0</b>
	<b>Equal Balance:</b>	<b>\$ 300,000</b>

**Legal Citation: M.L. 2010, Chp. 362, Sec. 2, Subd. 8f**

#### **Appropriation Language:**

\$300,000 is from the trust fund to the commissioner of natural resources to establish additional and enhance existing outdoor school forest and prairie classroom networks throughout Minnesota.

### **II. PROJECT SUMMARY AND RESULTS:**

Since 1949, the School Forest Program has been Minnesota's outdoor classroom program. School Forests help combat nature deficit disorder by providing a place where preK-12 students learn core subjects (math, science, social studies, etc.) outdoors, while using nature as the base context. School Forests are diverse environments (prairie, forest, wetland, etc.) located statewide in urban and rural places, ranging from 1-300 acres. Schools and communities that establish a School Forest make a long-term commitment to sustain an outdoor classroom to be used by many students on a regular, consistent basis.

By establishing 20 new School Forests, this project will create 120 sites statewide and reach more than 1,500 teachers and 30,000 students. Program support provided to all 120 sites will enhance use and quality of outdoor activities through:

- Creation and delivery of a multi-day intensive School Forest course to increase teacher knowledge of and comfort in teaching outdoors,
- Delivery of site-specific trainings to increase school-wide teacher and student participation,
- Expansion of School Forest network through site-to-site contact and Web site development.

Individual site development and support for 75 new and existing School Forests will promote site sustainability and encourage teacher and student use of outdoor classrooms through:

- Creating and strengthening local, partner-rich School Forest Committees,
- Connections to local, state, and national outdoor education resources,
- Integrating existing outdoor education lessons into school curriculum,
- Correlating lessons to Minnesota Academic Standards,
- Providing outdoor teaching tools and learning kits.

**III. PROGRESS SUMMARY AS OF** *[insert date of Work Program progress report]:*

**IV. OUTLINE OF PROJECT RESULTS:**

**RESULT/ACTIVITY 1:** Develop and enhance School Forest networking opportunities and support services statewide.

**Description:**

These activities will benefit new and existing School Forests in all areas of the state and increase overall program strength, enabling the School Forest Program to serve more sites in the future with better quality support. Online networking features will be used to create a School Forest network that can communicate among themselves to advance outdoor education activities throughout the state and improve the quality of activities delivered. School Forest Web site features and social networking tools will be used to allow educators to learn and share with each other. Delivery of in-person information is important to establish buy-in and participation in site activities. Due to changes in school staffing, focus, and budget, many existing School Forest Committees need assistance regaining direction. A common challenge is administrative and school board knowledge of outdoor education benefits. Meetings with staff, administrators, school boards, and School Forest Committees will enhance site activity and sustainability and garner support for outdoor education. To determine the most useful services, staff will assess site coordinator needs regarding: new Web site features or content; social networking media; and traditional person-to-person support services. Information gathered will be used to inform the remaining outcomes. An estimated 1,500 teachers and 30,000 students at 120 School Forests statewide will be impacted by activities in result 1.

**Summary Budget Information for Result/Activity 1:**

<b>ENRTF Budget:</b>	<b>\$63,500</b>
<b>Amount Spent:</b>	<b>\$</b>
<b>Balance:</b>	<b>\$ 63,500</b>

<b>Deliverable/Outcome</b>	<b>Completion Date</b>	<b>Budget</b>
1. Assess site coordinator needs	March 2011	\$3,500
2. Create an interactive web portal for teachers to share School Forest activities and discussions.	March 2012	\$5,000
3. Develop School Forest Web site content and on-line features to address high priority teacher needs.	Ongoing, June 2012	\$12,000
4. Meet with School Forest Committees, staff, administrators, and school boards to strengthen committee, provide resources, and bolster support for outdoor education.	Ongoing, June 2012	\$43,000

**Result Completion Date: June 2012**

**Result Status as of January 2011:**

**Result Status as of September 2011:**

**Result Status as of March 2012:**

**Final Report Summary June 2012:**

**RESULT/ACTIVITY 2:** Establish 20 new School Forest sites throughout Minnesota.

**Description:**

Each School Forest site comes with its own set of legal parameters and community issues and must be dealt with independently. School Forests will be established as long-term, self-sustaining outdoor classrooms throughout all regions of the state. Particular emphasis will be given to engage schools in urban areas and southwest Minnesota. This involves a lot of leg work and thought on the front end. There is no cookie cutter approach. Each site will have its own natural resource features: forest, prairie, wetland, etc. Establishment of each site will involve significant staff time in the following areas: land acquisition; application process; teacher, administrative and school board meetings; school forest committees; teacher support; connections to local, regional, state, and national resources; Natural Resources Stewardship Plans; and site development. As needed, staff will participate in site-specific special events to raise school and community awareness of School Forest and its educational importance. Based on current program enrollment, it is expected that an additional 4,000 students and 200 teachers will participate in the School Forest Program upon completion of result 2.

**Summary Budget Information for Result/Activity 2:**

<b>ENRTF Budget:</b>	<b>\$129,750</b>
<b>Amount Spent:</b>	<b>\$</b>
<b>Balance:</b>	<b>\$ 129,750</b>

<b>Deliverable/Outcome</b>	<b>Completion</b>	<b>Budget</b>
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	<b>Date</b>	
1. Establish 20 School Forests statewide. 5 sites by July 2011 10 sites by December 2011 20 sites by June 2012	June 2012	\$62,750
2. Establish 20 well-supported School Forest Committees.	June 2012	\$59,250
3. Begin development of 10 Natural Resources Stewardship Plans. <i>(All 20 new School Forests will have a Stewardship Plan within 2 years of entering the program.)</i>	June 2012	\$7,750

**Result Completion Date: June 2012**

**Result Status as of January 2011:**

**Result Status as of September 2011:**

**Result Status as of March 2012:**

**Final Report Summary June 2012:**

**RESULT/ACTIVITY 3:** Integrate outdoor environmental education activities into school curricula.

**Description:**

There are many fantastic environmental and outdoor education programs that supply activities and lessons for schools to use in School Forests. Common barriers to using these activities are: teacher comfort teaching outdoors; teacher knowledge of materials and how to incorporate them into school curricula; lack of tools and supplies to conduct outdoor lessons. Teachers will learn ways to overcome such barriers through in-person outdoor education trainings. A series of School Forest site-specific workshops and specialized trainings will advance teacher comfort in teaching outdoors, provide access to climate change curriculum, and provide free access to programs such as Project Learning Tree, WILD, and WET. Project Learning Tree (physical environments and forests), WILD (wildlife), and WET (water) are the leading national environmental education activity guides, which are correlated to the Minnesota academic standards, and are designed to help students learn how to think, not what to think, about natural resources. An intensive multi-day School Forest course (residential course at a location like the Cloquet Forestry Center) will provide teachers with appropriate outdoor activities tied to the Minnesota academic standards from all DNR education programs and partner programs. Sessions will include outdoor lesson plans, outdoor recreation skills and connections, outdoor teaching skills, ways to teach about climate change, and outdoor education tools. A significant portion of the course will be dedicated to tying outdoor education lessons into existing school curriculum, so teachers leave with a well thought out action plan to incorporate outdoor education into their regular teaching schedule. School Forest sites will be encouraged to send a team of teachers to the

course to promote school-wide approaches. Outdoor education kits will be developed and will contain lesson plans and outdoor education tools (diameter tapes, magnifying glasses, thermometers, etc.). The kits will be designed to allow teachers to “grab and go” outside and engage kids in the outdoors. All activities will be correlated to the Minnesota academic standards. Based on current program enrollment, an estimated 75 School Forest sites, reaching 900 teachers and 18,750 students, will be served directly through activities in result 3.

**Summary Budget Information for Result/Activity 3:**

**ENRTF Budget:** \$106,750  
**Amount Spent:** \$  
**Balance:** \$ 106,750

<b>Deliverable/Outcome</b>	<b>Completion Date</b>	<b>Budget</b>
1. Develop and deliver 20 site-specific workshops and specialized trainings. 3 by March 2011 10 by September 2011 20 by June 2012	June 2012	\$40,475
2. Develop and deliver one intensive, multi-day School Forest course.	June 2012	\$33,915
3. Develop and distribute 75 outdoor education kits. 10 by September 2011 20 by June 2012	June 2012	\$32,360

**Result Completion Date: June 2012**

**Result Status as of January 2011:**

**Result Status as of September 2011:**

**Result Status as of March 2012:**

**Final Report Summary June 2012:**

**V. TOTAL ENRTF PROJECT BUDGET:**

**Personnel:** Total: \$ 234,000

New position north, salary and benefits: 0.75 FTE for 2 years = \$100,000

New position south, salary and benefits: 1 FTE for 2 years = \$134,000

**Contracts:** \$ 0

**Equipment/Tools/Supplies:** Total: \$38,700

20 Site Specific Workshops and Specialized Trainings: \$6450

Includes: PLT, WILD, and WET guides, handouts, teaching supplies for facilitator (field guides, thermometers, etc.)

1 Multi-day residential School Forest Course: \$13,500

Includes: overnight expenses (lodging and food), curriculum guides, handouts, teaching supplies for facilitators (increment borer, clinometers, etc)

60 Outdoor Education Kits: \$18,750

Includes: bin, lesson plans, and teaching tools to conduct lessons (magnifying glasses, diameter tapes, thermometers, etc.)

**Acquisition (Fee Title or Permanent Easements): \$ 0**

**Travel:** \$ 25,000 in Minnesota

Travel expenses for DNR staff to: meet with school staff and administration, school boards, and School Forest Committees regarding startup and maintenance of site; site-specific workshops; specialized trainings; and setup and delivery of multi-day School Forest course.

Travel includes food and lodging estimates, where appropriate for overnight trips to meet with schools a great distance from office. Majority of travel cost is mileage.

**Additional Budget Items:** \$2,300

Printing: \$500

Printing of "Planting the Seed: How to Start a Minnesota School Forest"

Other Direct Costs: \$1,800

Booth fees to attract new schools to the School Forest Program: \$1,250

Mailing for distribution of outdoor education kits, lesson plans, etc.: \$550

**TOTAL ENRTF PROJECT BUDGET: \$300,000**

**Explanation of Capital Expenditures Greater Than \$3,500:**

## **VI. PROJECT STRATEGY:**

### **A. Project Partners:**

Staff from the University of Minnesota Extension Service, Minnesota Pollution Control Agency, the Minnesota Association for Environmental Education, and many environmental learning centers will assist with delivery of workshops and trainings. City, county, and U.S. Forest Services natural resources staff will assist with School Forest site development and maintenance. Over 100 Minnesota school districts will participate in the project to provide local on-site support and site management. This request does not include funding for these partners.

### **B. Project Impact and Long-term Strategy:**

This project provides a solution to nature deficit disorder. Approximately 30,000 students and 1,500 teachers throughout Minnesota will have frequent outdoor learning experiences in nearby nature. Students will learn core subjects (math, science, social studies) through the lens of nature in their School Forests. Repeat visits to School

Forests will promote a sense of identity in and connection to nature for both students and teachers, thus creating current and future natural resource stewards.

The School Forest Program began in 1949, through a legislative statute. The Minnesota DNR has invested many resources into the creation and maintenance of School Forests throughout the state and plans to continue to provide support for decades into the future. All School Forests served and created through this project will be able to rely on the DNR as a backbone of program support. The DNR has committed to providing the following services to all School Forests in good standing:

- Support mailings
- Forester and education staff assistance
- Education materials and workshops for teaching outdoors
- Program Web site and handbook
- Natural Resource Stewardship Plans
- Forestry education updates & other communication
- Conference or other networking/development opportunities

In addition, the School Forest Program model establishes strong local School Forest Committees that will provide site support for many years to come. By entering the School Forest Program, schools commit to the following responsibilities:

- Conduct at least 5 educational activities annually
- Submit an annual report
- Provide a School Forest Committee and Site Coordinator
- Provide appropriate funding to support site activities
- Follow recommendations outlined in Stewardship Plan
- Designation of site land use for outdoor classroom purposes
- Secure ownership of land or a management agreement with land owner indicating conditions of use that meet School Forest Program criteria

In Summary, DNR and local school staff and School Forest Committee members work together to keep the site running and ensure children are experiencing nature.

#### **D. Other Funds Proposed to be Spent during the Project Period:**

##### **DNR In Kind**

DNR Web Support (.15 X 2 yrs)	\$24,375.00
DNR: Dawn Flinn (.10 X 2 yrs)	\$16,250.00
DNR Ed Staff (.15 X 2 yrs) curriculum & workshop delivery	\$24,375.00
Local DNR Staff (.20 X 2 yrs) site management & land acquisition	\$32,500.00
DNR For Ed Staff (.5 Fte X 2 yrs)	\$81,250.00

**DNR In Kind \$178,750.00**

**DNR Governance & Shared Services \$50,375.00**  
(1.75FTE X \$81250/FTE X 2 yrs) - (\$234000 grant salary covered)

**Other In Kind \$110,000.00**  
School, community, business, parent support  
(\$50/hour X 100/hrs/site X 20 sites)

**D. Spending History:** None

**VII. DISSEMINATION:**

This project will expand and enhance the Minnesota School Forest Program Web site ([www.mndnr.gov/schoolforest](http://www.mndnr.gov/schoolforest)). Information and tools created by the project will be available at this Web site.

Presentations at 2 state and 1 national education conferences are planned.

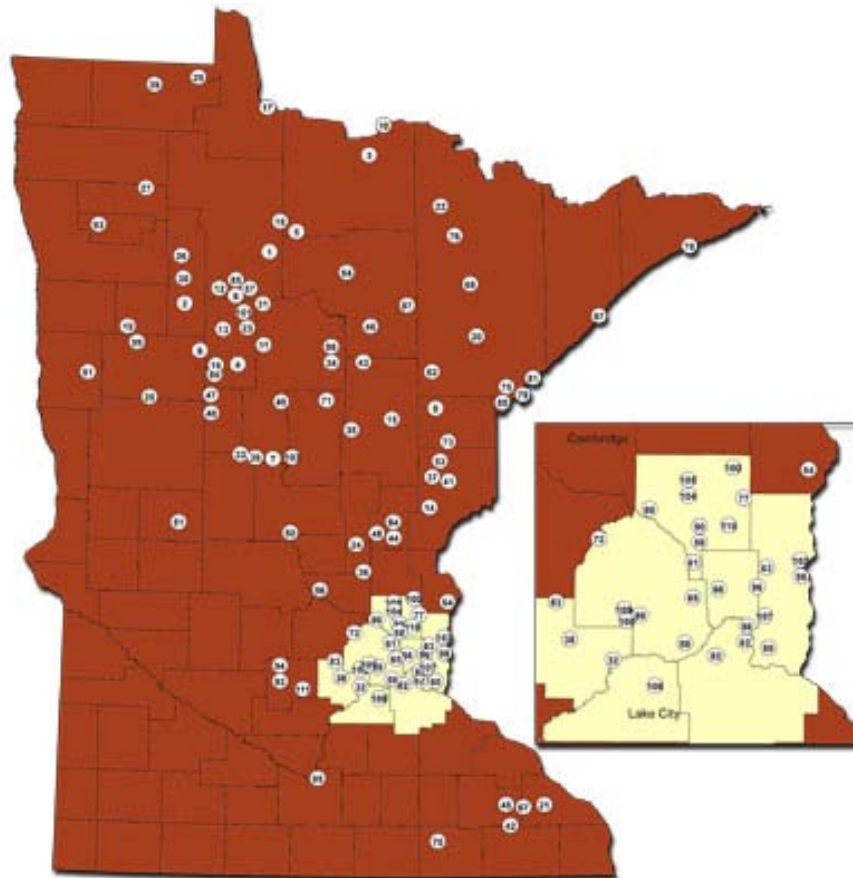
Results will be promoted to the public through news releases. Targeted articles for educators and natural resource staff promoting and explaining the project will be submitted to appropriate education and natural resource magazines and newsletters.

**VIII. REPORTING REQUIREMENTS: Periodic work program progress reports will be submitted not later than January 2011, September 2011, and March 2012. A final work program report and associated products will be submitted between June 30 and August 1, 2011 as requested by the LCCMR.**

**IX. RESEARCH PROJECTS: N/A**



# 2009 School Forest Map



Attachment A: Budget Detail for 2010 Projects											
Project Title: Expanding and Strengthening Outdoor Classrooms at Minnesota Schools											
Project Manager Name: Amy Kay Kerber											
Trust Fund Appropriation: \$ 300,000											
2010 Trust Fund Budget	Result 1 Budget:	Amount Spent (date)	Balance (date)	Result 2 Budget:	Amount Spent (date)	Balance (date)	Result 3 Budget:	Amount Spent (date)	Balance (date)	TOTAL BUDGET	TOTAL BALANCE
	Develop and enhance School Forest networking opportunities and support services statewide.			Establish 20 new School Forest sites throughout Minnesota.			Integrate outdoor environmental education activities into school curricula.				
<b>BUDGET ITEM</b>											
<b>PERSONNEL: wages and benefits</b>											
New Position North: .75 FTE	25,000		25,000	50,000		50,000	25,000		25,000	100,000	
New Position Metro/South: 1 FTE	33,500		33,500	67,000		67,000	33,500		33,500	134,000	
<b>Other direct operating costs</b>											
Mailing: distribution of grant products	0		0	0		0	550		550	550	
Booth Space at Education Events	0		0	1,250		1,250	0		0	1,250	
<b>Printing</b>	0		0	500		500	0		0	500	
<b>Supplies (list specific categories)</b>											
Site-Specific Workshops	0		0	0		0	6,450		6,450	6,450	
School Forest Course	0		0	0		0	13,500		13,500	13,500	
Outdoor Education Kits	0		0	0		0	18,750		18,750	18,750	
<b>Travel expenses in Minnesota</b>	5,000		5,000	11,000		11,000	9,000		9,000	25,000	
<b>COLUMN TOTAL</b>	<b>\$63,500</b>	<b>\$0</b>	<b>\$63,500</b>	<b>\$129,750</b>	<b>\$0</b>	<b>\$129,750</b>	<b>\$106,750</b>	<b>\$0</b>	<b>\$106,750</b>	<b>\$300,000</b>	<b>\$0</b>